mineral content, bone areas, cortical thickness, periostal and endosteal circumference and we compared results with our published tibia pQCT database of 219 age-matched healthy postmenopausal women. We performed statistical analysis and data is expressed as mean±SD.

Results: There were no statistical differences between patients with IH and controls in all age-groups concerning variables of trabecular bone. Concerning cortical bone (38% slice), we found statistical differences only in the younger (48-59 y) age group between patients with IH vs. age-matched controls: patients with IH had lower cortical bone mineral mass (256.54±39.95 vs. 282.63±38.63 mg/cm, p=0.019), cortical area (220.4 ±33.34 mm^2 vs. 246.85±32.85, p= 0.005) and cortical thickness (3.90±0.81 vs. 4.53±0.57 mm, p=0.0005), while they had greater endosteal circumference (45.27 ±8.11 vs. 40.34±4.51 mm, p=0.001).

Conclusion(s): Early (48-59 y) postmenopausal women with IH have lower values of cortical bone mass, cortical area, cortical thickness and greater endosteal circumference vs. age-matched controls. Older women with IH were not found to have statistical differences on bone measurements vs. age-matched controls using pQCT of the tibia.

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THE STIFFNESS INDEX ACCORDING TO HEEL QUANTITATIVE ULTRASOUND AND BODY MASS INDEX – ANY CORRELATIONS?

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Objective(s): The heel quantitative ultrasound (QUS) is a very easy-to-do analyze in order to obtain information related fracture risk. New data revealed to correlations between the BMI and the bone health. We correlated the BMI and QUS parameter stiffness index (SI).

Material & Methods: The inclusion criteria were women in menopause. Peripheral QUS was performed with a GE Lunar Achilles device. The exclusion criteria refer to the women who were previously treated for osteoporosis with anti-resorbtives (except for vitamin D and calcium supplements). The informed consent of each woman was obtained. The linear regression and student t-test were used.

Results: We introduced the 347 patients (p) in 5 groups based on their age: group 1 (≤40 yrs) -6 p, group 2 (from 41-50 yrs) 61 p, group 3 (range 51-60 yrs) 178 p, group 4 (between 61-70 yrs) 80 p, and group 5 (from 71-80 yrs) 22 p. The correlations between BMI and QUS-SI (r^2) were: group 1 r^2=0.03 (p=0.08), group 2 r^2=0 (p<0.0001), group 3 r^2=0.08 (p<0.0001), group 4 r^2=0 (p<0.0001), group 5 r^2=0.09 (p=0.04). For all the 347 p, r^2=0.01, p<0.001.

Conclusion(s): The age groups analyze between SI and BMI revealed statistically significant no correlation.

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SURVIVAL IN THE ELDERLY FOLLOWING A PROXIMAL FEMUR FRACTURE: ONE-YEAR FOLLOW-UP STUDY

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Objective(s): The aim of this study was to determine the one year survival rate after a proximal femur fracture and to investigate the predictors for fatality.

Material & Methods: All patients that were admitted, with an acute proximal femur fracture caused by a fall of low energy impact from 1 May 2008 - 30 April 2009 in a main Portuguese hospital were invited to participate in the study. During hospitalization, a questionnaire was applied by personal interview to the participants, with questions about demographic characteristics, lifestyle, activities before fracture, previous fractures and clinical history. From the hospital medical records, information about type of fracture, surgical treatment, day of surgery, comorbidities and ASA score were collected. A follow-up study was conducted, by phone call interviews at 3, 6, 9 and 12 months after the fracture. Association between fatality and the independent variables were analyzed using the Kaplan-Meier method (log-rank test) and Cox Regression.

Results: 252 patients (79% women) agreed to participate in the study. Female patients presented a mean age of 80.3 SD 9.5 different from the mean age in male patients of 76.3 SD11.3 (p-value 0.02). Only 8% of the patients had no comorbidities. Hypertension disease was more frequent among the female patients (56%) than in the men (38%) (p-value 0.02) and respiratory diseases were more common in the men (36%) compared to women (13%) (p-value<0.0001). During the follow-up 23 patients were lost but information on survival for 14 of them were possible to retrieve from the hospital registers. Fatality among men was 22%, 25%, 30%, 37% respectively at 3, 6, 9 and 12 months follow-up being 8%, 14%, 20% and 23% among women. The predictors of fatality were: male gender (HR

2.53 95% CI 1.40-4.57), age (HR 1.06 95% CI 1.03-1.10), delay in surgery (HR 1.07 95%CI 1.03-1.12) and ASA score (HR 1.92 95% 1.09-3.42).
Conclusion(s): After one year, fatality was 60% higher among men, even after adjusted for confounders. For each day of delay to surgery there was an increased risk of 7% on the fatality rates.

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SERUM URIC ACID AND ULTRASOUND DETECTION OF MONOSODIUM URATE DEPOSITION IN PERIPHERAL JOINTS – CARDIOVASCULAR RISK FACTORS IN PATIENTS WITH OSTEOARTHRITIS

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Objective(s): Hyperuricemia (HU) is a well recognized risk factor for cardiovascular disease (CVD) associated with the development of hypertension, metabolic syndrome, diabetes mellitus and frequently found in patients with osteoarthritis (OA). Carotid intima-media thickness (IMT) of the carotid arteries assessed by ultrasonography is validated as a sensitive marker for atherosclerosis, directly associated with an increased risk of CVD. The aim of the study was to evaluate the role of serum uric as a risk factor for CVD in patients with OA as well as to prove the usefulness of ultrasound detection of monosodium urate crystal deposition in osteoarthritic joints.
Material & Methods: The study groups included 42 patients with OA without HU (mean age 49±9 years) and 46 patients with OA and HU (mean age 54±10 years), newly diagnosed, nonhypertensive, previously untreated, registered over a period of 2 years. The patients underwent complete clinical, serological evaluation (systolic and diastolic blood pressure, total cholesterol, LDL-cholesterol, HDL-cholesterol, triglycerides, serum uric acid, inflammation markers) and high resolution B-mode ultrasound to measure the IMT of the common carotid artery, as well as multiplanar evaluation of the first metatarsophalangeal joints, anterior recess of the tibiotalar joints and knee joints.
Results: IMT values were significantly higher in patients with OA and HU (0.99±0.22 mm), compared with the patients without HU (0.65±0.15 mm), $p<0.001$. 45.65% of patients with OA and HU showed US findings indicative of MSU crystal deposition, while these US signs were identified in only 11.90% of patients with OA without HU. No differences were recorded in the appearance of osteophytes between hyperuricaemic patients and those with normal uric acid levels. Differences have been seen in the aspect of the synovitis at the level of the metatarsophalangeal joints.
Conclusion(s): The present study has showed that high serum uric acid levels are associated with atherogenesis independently from hypertension in patients with OA and also with a higher index of suspicion proved by the deposition of the monosodium urate crystals in peripheral joints. Early screening for HU and MSU deposition in joints as well as lowering serum uric acid levels might be beneficial in slowing progression of IMT and reducing CVD risk in patients with OA.

P637
EVOLUTION OF BIOCHEMICAL MARKERS OF BONE REMODELING DURING TREATMENT WITH STRONTIUM RANELATE

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Objective(s): Strontium ranelate is used in the treatment of postmenopausal osteoporosis and it has also an effect on bone formation. During antiresorbtive effect of bisphosphonates (that don't influence the bone formation), after a certain period of time, it can occur the "frozen bone" – a severely suppressed bone turnover. This study evaluates the efficiency and the compliance during the therapy with strontium ranelate after 6 months for osteoporosis in postmenopausal women.
Material & Methods: We present the results of a retrospective study which included 50 women that were registered in The National Programme of Osteoporosis; the average age was 66.4±8.5 SD years, in postmenopausal for 18±8.6 SD years and with a T-score of de 3.42±0.39 SD (at the beginning of the study). They were treated daily with strontium ranelate (2 g) and vitamin D. We investigated: the presence of fracture, risk factors, biologically: calcemia, phosphatemia, vitamin D, markers of bone formation (osteocalcin), markers of bone resorption (crosslaps).
Results: Most of them received previously antiresorbtive therapy; 6 had vertebral fracture; all of them had a high compliance during the therapy; the values of calcemia remained almost the same (from 9.78±0.71 mg/dl to 9.71±0.63 mg/dl), but there was a bone formation process: osteocalcin from 22.4±27.2 ng/ml to 24.75±28.2 ng/ml and a suppressing bone resorption: cross-laps from 0.58±0.35 ng/ml to 0.49±0.31 ng/ml.
Conclusion(s): Strontium ranelate is indicated in the therapy of postmenopausal osteoporosis, especially because it has a dual mode of action on bone turnover.

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THE BODY MASS INDEX AND BONE MINERAL DENSITY AGE RELATED CORRELATIONS – A STUDY IN 347 WOMEN